

Intergovernmental Oceanographic Commission
Reports of Meetings of Experts and Equivalent Bodies



The Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS)

Fourth Session

Lefkada, Greece

4–7 May 2004

UNESCO

IOC/ABE-LOS IV/3
Paris, 1 June 2004
Original: English*

(SC-2004/CONF.602/CLD.7)

* Also translated into French.

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1. OPENING AND WELCOMING ADDRESSES

- 1 Mr Elie Jarmache, Chair of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS) opened the Fourth Meeting of IOC/ABE-LOS at 9:30 on Tuesday 4 May 2004. He invited the representatives of the Government of Greece, the Prefecture and Municipality of Lefkada and the IOC Executive Secretary/Assistant Director-General of UNESCO to make their welcoming addresses and statements.
- 2 Dr Emmanuel Gounaris, Minister Plenipotentiary of Foreign Affairs of Greece Chairman of the Greek Committee for IOC, welcomed the participants on behalf of his government. There followed addresses by the Prefect of Lefkada, Mr Kristos Lazaris; the Mayor of Lefkada represented by Mr Spiros Kogas who welcomed the participants to the Island and the Monastery.
- 3 Dr Patricio Bernal, Assistant Director-General of UNESCO and IOC Executive Secretary thanked Greece for hosting the session of IOC/ABE-LOS and commended on the work of the Greek Committee for the IOC. He also thanked the Prefect of Lefkada, for supporting the organization; the Bishop of Lefkada, for offering the location of Moni Fameromenis; Mr Spiros Kogas, the Vice-Mayor of Lefkada for its efforts and warm welcoming; and the Ministry of Foreign Affairs, represented by Dr Gounaris, Head of the Greek Committee for IOC, for its invitation.
- 4 He extended thanks to the Governments of France and Greece for their contributions to the IOC Trust Fund which enabled the attendance of experts from developing countries.
- 5 He recalled that the IOC Assembly at its 22nd Session in June 2003 requested the IOC/ABE-LOS in Resolution XXII-12 to continue working in close co-operation with UN/OLA/DOALOS on the following three issues:
 - (i) the legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data;
 - (ii) the IOC Internal Procedures related to an effective and appropriate use of Article 247 of UNCLOS;
 - (iii) the practices of the IOC Member States regarding marine scientific research and transfer of marine technology.
- 6 Dr Bernal reported on new development on oceans affairs, particularly on the results from the Ministerial Conference on Earth Observations Summit (25 April 2004, Tokyo), and on the preparations for the fifth meeting of UN Open-ended Informal Consultative Process on Oceans (ICP) to be held on 7–11 June 2004 in New York.
- 7 In closing, he drew the attention of the session to the main issues on which decisions are required in order to produce results which may be submitted to the 37th Session of the IOC Executive Council (23–29 June 2004, Paris).

2. ADMINISTRATIVE ARRANGEMENTS

2.1 DESIGNATION OF THE RAPPORTEUR

8 The Advisory Body was invited to designate a Rapporteur for the meeting in accordance with IOC Rules of Procedure n°25. Mr Ariel Troisi from Argentina offered himself as volunteer. **The Advisory Body accepted** the offer.

2.2 ADOPTION OF THE AGENDA

9 The Advisory Body was invited to adopt the agenda and timetable of the meeting, on the basis of the Revised Provisional Agenda (Doc. IOC/ABE-LOS IV/1 prov. Rev.) and Timetable (Doc. IOC/ABE-LOS IV/1 Add. prov. rev). After recalling the informal character that it was agreed to assign to the discussion under item 3, one delegate proposed to discuss item 4.4 on the report of the Secretariat on results of Questionnaire No. 3 before item 4.3. **The Advisory Body decided** to modify the Agenda accordingly and as in Annex I to this reports.

2.3 DOCUMENTATION

10 The Technical Secretary, Ms Aurora Mateos, introduced the documents (Doc. IOC/ABE-LOS IV/4 prov.). She explained that the report of the day will be sent for translation the same day and will be tabled the day after. She invited the delegates to point out inaccuracies, if any, without delay and before the formal adoption of the report.

2.4 CONDUCT OF THE MEETING

11 The working hours for the meeting and the social events proposed by the Greek Committee for IOC were examined and accepted.

3. INFORMATION SESSION ON “ADVANCES IN OCEAN SCIENCE AND MODELLING: BENEFITS AND NEW APPLICATIONS”

12 This information session was conceived to prepare for the discussions of the IOC/ABE-LOS sub-group on “the legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data” (item 4.4 of the agenda). This symposium provided the Advisory Body with relevant information related to current advances in ocean science and modelling. Five speakers were invited to deliver speeches with different perspectives on this matter. Each presentation was followed by a short discussion.

13 Henry Savina, Chairman of the JCOMM Expert Team on Maritime Safety Services, Météo-France, Toulouse, made a presentation on “Maritime Navigation Safety”. H. Savina, after providing a short description of Maritime Safety Information (MSI) products, described the scheme of the forecast process and stressed the importance of observation systems and data management at national, regional and global levels. In particular, some studies on data assimilation in numerical weather and oceanic predictions highlighted the complementarity of the space and terrestrial networks and demonstrated how enhanced data availability would help to improve safety products and services. JCOMM structure and Terms of Reference were also recalled.

- 14 Trevor Gilbert, Principal Adviser at the Scientific & Environmental Maritime Safety & Environmental Strategy, Australian Maritime Safety Authority, made a presentation on “Ocean Forecasting for Major Maritime Pollution Emergencies”. T. Gilbert remarked that the influence of weather and sea conditions have always been a dominant factor in the loss of human lives and ship losses due to maritime accidents. The ability to accurately monitor and predict weather, climate and oceanographic conditions can have a great benefit in avoiding maritime accidents, pollution events and saving lives at sea. He highlighted the vital role of accurate and reliable meteocean data and predictive models in the response to maritime incidents involving oil and chemical spills, foreshore clean up and ship salvage operations, as well as in maritime search and rescue planning.
- 15 Satish R. Shetye, Director of National Institute of Oceanography (NO) Goa, India, made a presentation on “Extreme Events in the coastal zone: an oceanographer’s perspective”. S. Shetye considered three coastal phenomena from the point of view of underlying ocean processes: storm surges, tsunamis and harmful algal blooms. He emphasized that in view of the socioeconomic benefits that result from an effective warning system of extreme events, the following should be encouraged: (i) data collection and free global access to the data collected; (ii) capacity building to benefit from analysis of the data.
- 16 Divino Moura, Director of the National Institute of Meteorology of Brazil, made a presentation on “Drought Forecast for South America: the role of tropical sub-surface temperature”. D. Moura recalled the TOGA programme (Tropical Oceans and the Global Atmosphere Programme) which provided a better understanding of the role of tropical sea surface temperatures in climate fluctuations, on a monthly to interannual scales. He showed the state of the art in climate prediction using global multi-model ensembling run in supercomputers at the IRI (International Research Institute for climate prediction) at Columbia University, NY in cooperation with FUNCEME (Foundation for Meteorology and Water Resources, Brazil). Results were shown that demonstrate the need and use of oceanographic data for climate forecast.
- 17 William Nyakwada, Deputy Director at the Technical Services of Kenya Meteorological Department made a presentation on “Ocean Observational Data: Improving seasonal to interannual forecasting for Africa”. W. Nyakwada recalled that the ocean phenomena are interconnected and that it is very important to enhance the observations over the Indian and Atlantic Oceans to support disaster reduction initiatives for Africa. Frequent cold ENSO (El Nino/Southern Oscillation) events and warm ENSO events have been associated with decline or increase of rainfall in parts of Africa. He gave an overview of studies indicating the usefulness of Sea Surface Temperatures (SST) in processing seasonal climate outlooks in the region and some success stories in the use of SSTs in seasonal to interannual forecasting in parts of Africa. The ocean observational data are very useful for seasonal to interannual climate outlooks and early warning activities in the region.
- 18 Those five presentations had a common theme. They demonstrated the importance of ocean observing systems in terms of socio-economic benefits and they stressed the vital role that enhanced data availability can play in providing warning and forecast. Indeed, this theme is a sign that ocean observing systems are becoming operational in the same sense that atmospheric system provide observations to weather forecast.
- 19 The presentations also confirmed the crucial role of capacity building in its broadest sense for any effective scheme for collection of oceanographic data.

20 One delegate expressed the view that such information was crucial for delegates from developing countries to reach the last updated knowledge on oceanographic issues, and invited the IOC Executive Secretary to keep the concept of information session alive and to reiterate it.

21 **The Advisory Body commended** the IOC Executive Secretary, Dr Bernal, for the high quality panel of speakers and the relevance of the subjects that were presented.

4. REPORTS OF INTERSESSIONAL ACTIVITIES

4.1 CHAIRMAN'S REPORT ON IOC/ABE-LOS ACTIVITIES DURING THE INTERSESSIONAL PERIOD

22 Mr Elie Jarmache, Chairman of IOC/ABE-LOS, reported on Doc. IOC/ABE-LOS IV/6 setting out the decisions taken by the 22nd Session of the IOC Assembly with regard to the IOC and UNCLOS related matters. He emphasized the fact that the United Nations General Assembly Resolution 58/240 welcomed the adoption of the criteria and guidelines on the implementation of Part XIV of UNCLOS which was the result of the IOC/ABE-LOS working sub-group chaired by Ariel Gonzalez.

23 He explained that the initiative of holding an information session to provide IOC/ABE-LOS experts with useful background information related to the collection of oceanographic data, the current state of scientific research and the development of operational oceanography was proposed by Stan Wilson, from the United States National Oceanic and Atmospheric Administration.

24 He reminded the Advisory Body of the mandate given by the IOC Assembly to establish an open-ended sub-group "to provide advice on the legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data". This is a very substantive matter for the scientific community. He commented on the appointment of Professor Hakapää as Chairman of the subgroup and reminded the expectations of the IOC regarding the work of this sub-group. He also recalled the work in progress on the application of Article 247 of the Convention and his intention to submit soon conclusions to the IOC governing bodies having in mind the deadline of the next session of the Assembly in 2005.

25 In addition, he mentioned the importance of practices of Member States in relation to the application of Part XIII, in particular the conditions governing consent by the coastal State. He referred to doc. IOC/ABE-LOS IV/9 as a document of synthesis of the consultations already undertaken by the Secretariat and the need for the establishment of a sub-group to draw conclusions on this matter. He referred to the draft terms of reference for the effective functioning of the said sub-group and extended an invitation to comment on it.

26 Commenting on the Chairman's report, a question was raised by one delegation about the actions the IOC Secretariat has undertaken to put in practice the criteria and guidelines on transfer of marine technology and capacity building. In reply, the IOC Executive Secretary mentioned that for several months there had been a limited capacity for response and follow-up. To address this limited capacity, a new Technical Secretary for IOC/ABE-LOS was recruited, as well as an expert on capacity building issues. He also alluded to IOC's participation in the preparations for the establishment of a Global Marine Assessment (GMA) process. While taking note of these explanations, one delegate insisted on the importance of

implementing the Criteria and Guidelines, and suggested that the IOC Executive Secretary reports on this matter at the next session of the IOC Executive Council. In his view, such implementation was essential, given the strong links between the criteria and guidelines and the issues addressed in these others sub-groups of IOC/ABE-LOS.

27 **The Advisory Body welcomed** the new Technical Secretary and **expressed** its appreciation for her predecessor's contributions.

28 Regarding paragraph 10 of Doc. IOC/ABE-LOS IV/6 a question was raised on the status of biodiversity in the vicinity of the sea floor beyond national jurisdiction, and on how it could be addressed by IOC/ABE-LOS. It was recalled that a decision of the Assembly or Executive Council is needed to take further action. The Observer from the IOC/IHO/IAG Advisory Board of Experts on the Law of the Sea (ABLOS) suggested that his group might be better placed to deal pro-actively with emerging issues of this nature.

29 The text of the Chairman's report is included herewith as Annex III.

4.2 PROGRESS REPORT OF THE CHAIRMAN OF THE IOC/ABE-LOS SUB-GROUP
ON THE POSSIBLE ESTABLISHMENT OF AN IOC INTERNAL APPROPRIATE
PROCEDURE RELATED TO AN EFFECTIVE USE OF ARTICLE 247 OF
UNCLOS ON MARINE SCIENTIFIC RESEARCH PROJECTS UNDERTAKEN BY
OR UNDER THE AUSPICES OF INTERNATIONAL ORGANIZATIONS

30 Professor Alfred Soons, Chairman of the sub-group in charge of drafting an IOC internal procedure implementing Article 247 of UNCLOS, explained the work undertaken since IOC/ABE-LOS III in 2003. He referred to his memoranda dated 15 September 2003 which had been sent to the Advisory Body in addition of two Memoranda dated 2 February and 19 March 2004. He expressed his appreciation for the comments sent by the IOC/ABE-LOS members mentioned in his memoranda. He proposed that the discussion of the Advisory Body would focus on the six elements identified in Annex II of his last Memorandum (doc. IOC/ABE-LOS IV/7), and would start with what he considered the main controversial issue, namely the matter dealt with in draft paragraph 6 of Draft 3 of the Internal Procedure.

31 One delegate noted that the French version of document IOC/ABE-LOS IV/7 had not been delivered in time for his careful examination.

32 Several delegates disagreed with this procedure and proposed to start discussions on the Draft from the beginning. They pointed out that the observations made at IOC/ABE-LOS III with regard to paragraphs 1 to 5 were not included in the Draft

33 At the invitation of the Chairman, **the Advisory Body accepted** to discuss problems arisen from paragraph 6 and to review paragraphs 7 to 10 which have not been examined at the third Meeting of IOC/ABE-LOS, before reading the whole document.

34 It was commented that some contributions were missing in the update addendum of Doc. IOC/ABE-LOS IV/7 Add. The Chairman of the Sub-Group explained that there were the ones submitted in September/October 2003. They had been included by email and could still be obtained from the Secretariat.

35 Opposing views were expressed on paragraph 6. Several delegates advocated for its complete deletion, while others desired to maintain it. Additionally, the Advisory Board

agreed on the need for the researching State or Organization to comply with Articles 248 and 249 of UNCLOS *vis-à-vis* the Coastal State. Some delegates considered that paragraph 6 would provide a mechanism for dealing with situations where full information according to Article 248 could not yet be available. Several other delegates considered such arguments incompatible with the clear obligations stated in Article 248. They added that paragraph 6 was an unlikely event, considering that the IOC Assembly would not take a decision on the basis of incomplete information.

36 One delegate proposed and it was supported by several delegates that a mechanism similar to a call for proposals could be established. The Chairman agreed with this idea, saying that such a mechanism was something missing in the whole procedure and he suggested that this might be implemented through Circular Letters.

37 In order to complete the first reading of the Draft document, opinions on paragraphs 7 to 10 were expressed as follows:

38 Paragraph 7: while agreeing with the principle embodied in paragraph 7, one delegate proposed its deletion and reformulation following the proposal submitted by Argentina in Document IOC/ABE-LOS IV/7 Add. Another delegate noted that the current version of paragraph 7 differs from the one discussed at IOC/ABE-LOS III.

39 Paragraph 8: several delegates proposed to delete paragraph 8 as it is already covered by paragraph 1. Other delegates considered that it should be kept since it addresses different situations from that of paragraph 1. One delegate proposed to insert the last part of paragraph 8: *“Or otherwise has expressed its willingness to participate in the project in conformity with the specifications contained in the Annex”* at the end of Paragraph 1, therefore deleting paragraph 8.

40 Paragraph 9: while agreeing with the principle embodied in paragraph 9, one delegate proposed its deletion and reformulation following the proposal submitted by Argentina in Document IOC/ABE-LOS IV/7 Add. Another delegate proposed to delete the last two lines, from the word “unless” to the end.

41 Paragraph 10: one delegate suggested to delete the reference to “International Law” and to refer directly to the Convention. This position was not shared by other delegates.

42 Extensive discussions were held regarding paragraph 6 as proposed by Argentina. One delegate stated that the IOC could not approve a project unless it had before it the information required by Article 248 to be provided to the organization. Another delegate expressed the view that the Convention, including Article 248, established no specific information an international organization needs to have before approving a project under Article 247. Rather it was for the organization itself to decide what information is needed to have at the time the organization takes its decision.

43 Finally, some delegates expressed the view that paragraphs 1 to 5 as formulated in Document IOC/ABE-LOS IV/7 have no validity because they do not incorporate the comments made at the previous session.

44 The Chairman requested Professor Soons to produce a new version of the Draft IOC Internal Procedure that includes the observations made at this session. He added that the final text on Article 247 to be presented to the Assembly in June 2005 should reflect the

conclusions reached by the Group on this issue even if no agreement is achieved by then. Professor Soons indicated that he would complete the report as soon as possible, by the end of September subject to communications.

45 **The Advisory Body adopted** Recommendation Number 1 to be submitted to the Executive Council at its 37th Session (23–29 June 2004).

4.3 REPORT BY THE SECRETARIAT ON THE RESULTS OF THE IOC
QUESTIONNAIRE 3 ON THE PRACTICES OF THE IOC MEMBER STATES
REGARDING MARINE SCIENTIFIC RESEARCH AND TRANSFER OF MARINE
TECHNOLOGY, AND ESTABLISHMENT OF AN OPEN-ENDED WORKING
SUB-GROUP OF IOC/ABE-LOS ON THIS ITEM

46 The Technical Secretary, Miss Aurora Mateos, introduced this item. She referred to Resolution EC-XXXV.7 and UNGA Resolution A/RES/56/12 (para. 23), which requested IOC to redraft the IOC Questionnaire number 3 on Practices of States in the field of MSR and TMT. She reported that in accordance with Resolution XXII-12 of the IOC Assembly, Recommendation 3 of IOC/ABE-LOS III was endorsed, and that IOC/ABE-LOS was requested to establish a new open-ended sub-group on this subject in order to draw conclusions from the data provided in Annex 6 of document IOC/ABE-LOS III/9.

47 The Technical Secretary introduced documents IOC/ABE-LOS IV/9 and the draft Terms of Reference for the new sub-group. The Chairman invited the Advisory Body to discuss their content.

48 The IOC Executive Secretary added that IOC acts in support of Member States in the practical implementation of parts XIII and XIV of UNCLOS. He informed the Advisory Body that no significant progress was made following IOC/ABE-LOS III on the compilation and follow-up of Practices of Member States. The IOC will pursue this task in the near future. **The Advisory Body accepted** the proposal made by the Executive Secretary to name the new sub-group: “IOC/ABE-LOS open-ended working sub-group on the practice of States in the application of Parts XIII and XIV of UNCLOS in the field of MSR and TMT”.

49 **The Advisory Body recognized** the value of the work done by Mr Rogers in analysing the answers received to Questionnaire Number 3 but **expressed** concerns on the low rate of responses, which hampered further analysis. Some delegations mentioned problems in completing the questionnaire. **The Advisory Body agreed** that drawing conclusions from responses to Questionnaire 3 was a task for the Advisory Body and not for the IOC/ABE-LOS Technical Secretary.

50 Discussing the draft Terms of Reference presented in Document IOC/ABE-LOS IV/9 add., a proposal was made that terms of reference be drafted for other sub-groups too. One delegation proposed redrafting the text by modifying paragraphs 1 to 5, and deleting paragraphs 6 to 9. There were opposing views on the proposal.

51 In commenting on the first paragraph of the draft Terms of Reference prepared by the Secretariat, one delegation proposed that the sub-group should reflect upon practices related to the collection of oceanographic data to fulfil its mandate. He explained that, this way, the sub-group could effectively assist the work of other sub-groups established to address such matters — in particular, by deriving from the replies to the questionnaire and other elements that examine potential difficulties for the collection of oceanographic data.

- 52 This proposal was opposed by another delegation, on the ground that, for his country, not all *in situ* collections of oceanographic data represent marine scientific research — and thus, are not regulated by Part XIII of UNCLOS. Such statement was in turn firmly opposed by the first delegation that expressed dismay at the consequences — namely, the prospects of circumventing the carefully balanced scheme set out in Part XIII. Notwithstanding this, and acknowledging a procedural observation by the Chairman that it would not be advisable to modify the language of the recommendation concerning the mandate of the sub-group (which was made at IOC/ABE-LOS III and was endorsed by the IOC Assembly at its 22nd session), the delegate agreed to include his proposal in the present report.
- 53 One delegate proposed that the mandate of the sub-group be extended as follows: (i) The sub-group shall be entitled to analyse future responses to Questionnaire number 3; (ii) The two-month time allotted to this task should be extended to allow the timely dissemination of the information in the working languages.
- 54 One delegate asked on Actions undertaken by IOC and DOALOS to help certain countries in the implementation of marine policy and the elaboration of national legislations, as mentioned in IOC/ABE-LOS III report, paragraph 40.
- 55 Following up on the request for assistance with regard to marine policy and the drafting of national legal instruments (IOC/ABE-LOS III, paragraph 41), the representative of UN/OLA/DOALOS provided some information on its activities.
- 56 In this regard, she referred to the annual Secretary-General's report on Oceans and the Law of the Sea to the 59th session of the General Assembly (A/59/ -), and in particular its paragraphs 116-120. DOALOS has sought to assist States in the fulfilment of their various obligations (e.g. Obligation of due publicity). In addition, DOALOS provides advisory services to States on the harmonization of national legislation with the provisions of UNCLOS and the drafting of rules and regulations to implement such legislation on issues related to the full realization of benefits by States under the Convention, including economic, technological, scientific and environmental issues. DOALOS also maintains an extensive reference collection dealing with ocean and the law of the sea website (www.un.org/Depts/LOS). She pointed out that, nevertheless, very few requests for assistance are received by DOALOS. She encouraged participants to take advantage of the information and other assistance provided by DOALOS.
- 57 **The Advisory Body requested** that the IOC Executive Secretary impulses the replying to Questionnaire no. 3 in order to obtain more information necessary to the new sub-group to draw conclusions.
- 58 One delegate reserved the right to react to the document at a later moment because of the late reception of the French version of Document IOC/ABE-LOS IV/9 Add.
- 59 **The Advisory Body adopted** Recommendation Number 2 to be submitted to the IOC Executive Council.

4.4 PROGRESS REPORT BY THE CHAIRMAN OF THE IOC/ABE-LOS SUBGROUP
ON THE LEGAL FRAMEWORK WITHIN THE CONTEXT OF UNCLOS WHICH
IS APPLICABLE FOR THE COLLECTION OF OCEANOGRAPHIC DATA

60 Professor Kari Hakapää, Chair of the Sub-group on the “legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data”, introduced this item. He reported on the methodology adopted in the preparation of the work of the subgroup. He reported on contacts made with UN/OLA/DOALOS and I-GOOS and referred to the three circulars he had distributed to the membership on the work of the subgroup. He also introduced document IOC/ABE-LOS IV/8 on suggested “points of interest” for comments and consideration that had been distributed in the intersessional period. He commented on the responses received from participants of the sub-group.

61 **The Advisory Body congratulated** Professor Hakapää for his appointment as coordinator and **expressed** its appreciation for the Information Session which had been very helpful for understanding the real and potential benefits of collecting and sharing oceanographic data.

62 At the initiative of one delegation, **the Advisory Body identified** five items to be considered by Professor Hakapää in outlining the sub-group’s mandate: (i) define what type of oceanographic data is being considered; (ii) where and by which means these data are going to be collected; (iii); the importance of the data for a wide range of users, including the scientific community; (iv) what are the difficulties, if any, which hinder the collection of data; (v) the appropriate legal framework that could be required to be set up taking into account the first four points.

63 The Observer from ABLOS suggested that the new sub-group consider establishing contact with additional organizations that are concerned with the collection and analysis of oceanographic data, mentioning specifically the International Hydrographic Organization (IHO) and the International Association for Geodesy (IAG), co-parent bodies of ABLOS along with IOC. He also invited members of the sub-group to avail themselves of the contacts and networks of ABLOS in their outreach to working members of the scientific community, and in their quest for feedback.

64 One delegate regretted the fact that the comments made to Doc. IOC/ABE-LOS IV/8 have not been included as an Addendum. The same delegate additionally regretted the lack of reference to UNCLOS as relevant documentation and respectfully disagreed to comment UNCLOS articles on the ground that interpreting the Convention is within the scope of the Meeting of States Parties and not that of the IOC. He further identified four important elements for the sub-group: (i) the purpose of the data collection; (ii) defining the difficulties faced in collecting data; (iii) the duty to notify coastal States; (iv) the capacity building.

65 One delegate mentioned that it was important to consider what sort of oceanographic data, for whom is the data being collected, what are the purposes and added the importance of associating to it capacity building issues. She recalled that Articles 234, 242, 244, 246, 248, 249, 250, 254, 262, 266, 268, 269, 270, 275, 276 of UNCLOS should be examined as they are linked to the collection of oceanographic data.

66 As an element for discussion of the group, the IOC Executive Secretary mentioned as an example of legal uncertainties the collection of data under the Voluntary Observing Ship (VOS)/Ship Of Opportunity (SOOP) programmes conducted under WMO-IOC and involving

both commercial operators and coastal States. He also mentioned that data collection has become a multipurpose activity for the benefit of the international community. He added that all gathered information is being made freely available for everybody via the World Wide Web.

67 One delegate proposed that Terms of Reference should be drafted for the future work of the sub-group. This proposal was **supported by the Advisory Body**.

68 One delegate stated that the challenge is to develop a mutual understanding of the real and potential benefits of collecting and sharing of oceanographic data from within a nation's EEZ, to motivate the reconciliation of differing legal views. He remarked that such a mutual understanding already exists within the meteorological community which enables the collection and sharing of routine meteorological observations from Volunteer Observing Ships while within a nation's EEZ, because of obvious benefits to weather forecasting and its impact on safety of life at sea. He noted that oceanographic data collection is changing today and that certain routine observations are becoming available in real time and with no period of exclusive use.

69 He also added that what mainly characterizes operational oceanography is the data availability, and it includes aspects related to: (i) timely access, typically in near real time; (ii) full and open access, typically with no proprietary rights; (iii) well defined variables, typically state variables (temperature, salinity, and current profiles), surface winds and water level, and in the future variables needed, as an example, for determining the role of the ocean as a sink for CO₂; and (iv) routine observations, typically using platforms and sensors deployed in some quantity. He invited the Group to help facilitate this transition to operational oceanography. This position was supported by other delegates.

70 It was proposed to replace the term "Research" in items 3 and 4 of Doc IOC/ABE-LOS IV/8 with the expression "oceanographic data collection". In response to comments made by some other delegates, it was expressed that Article 319 of UNCLOS limits the competence of conference of States Parties. This view was opposed by other delegates.

71 One delegate referred to the mechanism of dispute settlement, special arbitration for marine scientific research, to stress the fact that through such mechanism there is a way for interpretation of UNCLOS.

72 Other delegates considered that it was necessary to clarify what is really expected from the work of the sub-group, because even if IOC/ABE-LOS is not allowed to interpret UNCLOS, its work could significantly influence future applications of UNCLOS.

73 One delegate expressed that the legal framework should cover general data collection not only those projects undertaken by international organizations.

74 Another delegate considered that the Group should not target on data collection alone but it should define the data that are necessary for effective and smooth implementation of Marine Scientific Research.

75 In conclusion the Chairman stated that the Advisory Body will need to concentrate on objectives and purposes of research rather than means and tools. He further mentioned the importance of considering how to transit from marine scientific research towards "operational oceanography", their respective legal framework and the place and role of the coastal States.

He reaffirmed the need of having terms of reference for the subgroup but also not to constraint the Chair of the subgroup.

76 **The Advisory Body adopted** Recommendation Number 3 to be submitted to the IOC Executive Council.

5. RECOMMENDATIONS

77 **The Advisory Body adopted** the Recommendations included in Annex II to be submitted to the 37th Session of the IOC Executive Council (23–29 June 2004).

6. ADOPTION OF THE REPORT

78 **The Advisory Body considered** Item 4.4 needed further consideration and decided to adopt this section of the report by electronic correspondence after the session. **The Advisory Body adopted** this report by correspondence on 3 June 2004 for consideration by the IOC Executive Council at its 37th Session.

7. CLOSURE

79 Dr Bernal, on behalf of IOC and the Chairman on behalf of the Advisory Body of Experts on the Law of the Sea, expressed their sincere thanks to the Government of Greece, particularly to the local government of Lefkada Island, the Town Hall and Prefecture which have hosted the meeting; and to the Head of the Greek Committee, Dr Gounaris, for this invitation which allowed to enjoy the hospitality of Greece.

80 The Representative of UN/OLA/DOALOS reaffirmed that DOALOS continues to follow with interest and supports the work undertaken by the IOC/ABE-LOS.

81 Dr Gounaris thanked the participants for their attendance which has honoured the island and remarked that they will be always welcome to Lefkada Island.

82 The Fourth Meeting of the IOC/ABE-LOS was closed by the Chairman at 1:30 p.m., Friday, 7 May 2004.

ANNEX I

AGENDA

- 1. OPENING AND WELCOMING ADDRESSES**
- 2. ADMINISTRATIVE ARRANGEMENTS**
 - 2.1 DESIGNATION OF THE RAPPORTEUR
 - 2.2 ADOPTION OF THE AGENDA
 - 2.3 DOCUMENTATION
 - 2.4 CONDUCT OF THE SESSION
- 3. INFORMATION SESSION ON “ADVANCES IN OCEAN SCIENCE AND MODELLING: BENEFITS AND NEW APPLICATIONS”**
- 4. REPORTS OF INTERSESSIONAL ACTIVITIES**
 - 4.1 CHAIRMAN’S REPORT ON IOC/ABE-LOS ACTIVITIES DURING THE INTERSESSIONAL PERIOD
 - 4.2 PROGRESS REPORT BY THE CHAIRMAN OF THE IOC/ABE-LOS SUBGROUP ON THE INTERNAL APPROPRIATE PROCEDURE RELATED TO AN EFFECTIVE USE OF ARTICLE 247 OF UNCLOS ON MARINE SCIENTIFIC RESEARCH PROJECTS UNDERTAKEN BY OR UNDER THE AUSPICES OF INTERNATIONAL ORGANIZATIONS
 - 4.3 REPORT BY THE SECRETARIAT ON THE RESULTS OF THE IOC QUESTIONNAIRE 3 ON THE PRACTICES OF THE IOC MEMBER STATES REGARDING MARINE SCIENTIFIC RESEARCH AND TRANSFER OF MARINE TECHNOLOGY, AND ESTABLISHMENT OF AN OPEN-ENDED WORKING SUB-GROUP OF IOC/ABE-LOS ON THIS ITEM
 - 4.4 PROGRESS REPORT BY THE CHAIRMAN OF THE IOC/ABE-LOS SUBGROUP ON THE LEGAL FRAMEWORK WITHIN THE CONTEXT OF UNCLOS WHICH IS APPLICABLE FOR THE COLLECTION OF OCEANOGRAPHIC DATA
- 5. RECOMMENDATIONS**
- 6. ADOPTION OF THE REPORT**
- 7. CLOSURE**

ANNEX II

RECOMMENDATIONS

The IOC Advisory Body of Experts on the Law of the Sea at its fourth meeting (IOC/ABE-LOS IV) recommended the following:

1. **That the 37th Session of the IOC Executive Council: a) takes note of the progress report by the Chairman of the IOC/ABE-LOS Sub-group on the work concerning an appropriate internal procedure related to an effective and appropriate use of Article 247 of the UN Convention on the Law of the Sea; and b) requests that IOC/ABE-LOS continue its work on this topic, by electronic mail and in close co-operation with the Division of for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations (UN/OLA/DOALOS), on the basis of the comments and observations made when discussing this matter at IOC/ABE-LOS IV and during the intersessional period. This, with a view to consider the adoption of such internal procedure by the 23rd session of the Assembly.**
2. **That the 37th Session of the IOC Executive Council takes note of the Draft Terms of Reference of the open-ended IOC/ABE-LOS Sub-group on the practice of IOC Member States regarding marine scientific research and transfer of marine technology, annexed to these recommendations including the proposed change of the name of the sub-group to reflect the fact that the work of the sub-group focuses on the Practice of the Member States in the application of Parts XIII and XIV of UNCLOS; and**
3. **That the 37th session of the IOC Executive Council: a) takes note of the progress report by the Chairman of the open-ended IOC/ABE-LOS Sub-group on the legal framework for the collection of oceanographic data within the context of UN Convention on the Law of the Sea; b) also takes note of the draft terms of reference for such sub-group to be prepared by the Secretariat and the Coordinator of the sub-group to be adopted at the next Meeting of IOC/ABE-LOS; and c) requests that IOC/ABE-LOS continue its work on this topic in close co-operation with the Division of for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations (UN/OLA/DOALOS), on the basis of the comments and observations made when discussing this matter at IOC/ABE-LOS IV and during the intersessional period.**

ANNEX TO RECOMMENDATIONS

**Draft Terms of Reference
for the IOC/ABE-LOS Open-ended Working Subgroup
on the Practice of the Member States in the Application of Parts XIII and XIV of
UNCLOS**

- 1) The main Purpose of the IOC/ABE-LOS working sub-group on the Practice of the Member States in the application of Parts XIII and XIV of UNCLOS is to elaborate preliminary conclusions from the data provided in Annex 6 of Document IOC/ABE-

LOS III/9, Questionnaire Number 3, as complemented by the UN/OLA/DOALOS database on Marine Scientific Research legislations and other relevant objective data, in accordance with IOC Assembly Resolution XXII-12, Annex para. 3.

- 2) The IOC/ABE-LOS working sub-group shall work by electronic correspondence in close cooperation with the United Nations Office of Legal Affairs, Division of Ocean Affairs and the Law of the Sea of United Nations (UN/OLA/DOALOS). The Chairperson of the sub-group shall decide on the working methodology of the subgroup.
- 3) The IOC/ABE-LOS working sub-group shall issue the “First Draft of Preliminary Conclusions” drawn from the aforementioned Report on Practices of States in the Field of Marine Scientific Research (MSR) and Transfer of Marine Technology (TMT) on 1 October 2004. The “First Draft of Preliminary Conclusions” shall then be circulated to members of the IOC Advisory Body of Experts on the Law of the Sea for discussion and comments.
- 4) On the basis of these additional consultations, the Chairperson of the sub-group will prepare a revised Draft which shall be circulated at least two months in advance of the 5th Session of IOC/ABE-LOS in spring 2005 if the Executive Council, at its 37th Session, agrees to have such a session. This revised draft shall contain a Memorandum in which shall be set out a summary of views and comments provided by all experts in the field.
- 5) The 5th Session of IOC/ABE-LOS will examine the revised draft, and possibly adopt a recommendation to be submitted to the IOC Assembly at its 23rd Session for final adoption.
- 6) Should the IOC/ABE-LOS working sub-group need further information regarding the Questionnaire No.3, the Chairperson shall be entitled formally to contact National Experts and Institutions only through the IOC Secretariat. IOC Member States shall then provide the requested information or shall submit a written statement to IOC explaining its refusal to do so.

ANNEX III

**REPORT ON IOC/ABE-LOS ACTIVITIES
DURING THE INTERSESSIONAL PERIOD**

By Elie Jarmache, Chair of IOC/ABE-LOS

The activities during the intersessional period are based on Resolution XXII-12 (July 2003) of the Intergovernmental Oceanographic Commission (IOC) Assembly. This resolution takes into account our previous work, endorses its results and charges this Body of Experts with the task of addressing clearly specified themes.

The main outcome of our work concerns technology transfer; the Advisory Body proposed to the IOC Assembly Criteria and Guidelines on the implementation of Part XIV of the United Nations Convention on the Law of the Sea (UNCLOS). The draft was elaborated by the sub-group coordinated by our colleague Mr Ariel W. Gonzales. By Resolution XXII-12, the Assembly adopted the draft contained in document IOC-XXII/2 Annex 12 Rev. This result is acknowledged in United Nations General Assembly resolution 58/240 (paragraph 45) on Oceans and the law of the sea. We must breathe life into these criteria and guidelines on the transfer of technology by linking them with capacity-building and the different stages in the life of a scientific research project.

The IOC Assembly identified a very specific working theme for the Advisory Body of Experts on the Law of the Sea. In application of Resolution XIX-19 (July 1997), which sets out our terms of reference, the Assembly requested us “to provide advice on the legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data” (Resolution XXII-12). The request is of crucial importance and the establishment of an open-ended sub-group was provided for in Resolution XXII-12.

The Chair of our Advisory Body and the Executive Secretary received a letter from our American colleague from the United States National Oceanic and Atmospheric Administration (Mr Stan Wilson) underscoring the importance of the new question put by the Assembly to IOC/ABE-LOS. The letter asked whether an information meeting could be held on the occasion of the fourth session of the Advisory Body in Greece. After an exchange of electronic mail with our colleague from NOAA on points of fact rather than of substance, I stated that I had no objection to the holding of such an information session on the various scientific and technical aspects of the topic generally referred to as “operational oceanography”. Last year in Lisbon, we had as our guest the Chairperson of the IOC-WMO-UNEP Committee for the Global Ocean Observing System (I-GOOS). Agreeing to the meeting this year seems to me to be justified by our agenda, which includes a specific item on this subject. The letter from our colleague from NOAA/USA was transmitted to the Technical Secretariat for distribution on 23 February 2004.

Following consultations initiated by the IOC Executive Secretary, Professor Kari Hakapää of Finland, a member of the Advisory Body, agreed to chair the work of the sub-group. The legal framework for the collection of oceanographic data is item 4.3 on our agenda.

With regard to the current proceedings, there remains the question of the application of Article 247 of the Convention by means of an internal procedure of implementation for IOC

programmes. Professor Alfred Soons circulated a draft document taking account of the reactions and observations that emerged in 2003; he received a number of comments. I consider that the issue of Article 247 is difficult to resolve. Mr Soons took the initiative of contacting the Executive Secretary and myself in preparation for the present session. I hope that we will be in a position to put forward a result to the IOC governing bodies.

Since our first session, this body has considered that the practice of States in relation to the application of Part XIII was an important question, in particular since it concerns the conditions governing consent by the coastal State. A useful indicator of this practice is constituted by the existence or otherwise of national legislation on marine scientific research, provided that account is also taken of the practices of States in the matter of marine technology transfer. The Secretariat has worked on this question and on the questionnaire.

Two documents are submitted to you for consideration: document IOC/ABE-LOS IV/9 and document IOC/ABE-LOS IV/9 Annex. The first is a synthesis of consultations already undertaken and an update by the Secretariat. It is designed to inform the Advisory Body of the state of the question. The second document is a draft terms of reference to ensure the effective functioning of the sub-group on this agenda item. We could discuss its content, and also the principle itself of having terms of reference.

The intersessional period was marked by changes within the Secretariat, which have had an impact in terms of the slow start to our activities. The IOC/ABE-LOS group welcomes a new Technical Secretary, who arrived in January 2004. Her competence and abilities are considerable, as is the task she has had to take in hand.

Outside the remit of IOC/ABE-LOS, a considerable number of activities took place during the intersessional period having the law of the sea as common factor. You will all be aware of what has happened in the context of national activities. Questions relating to the need to protect and preserve the marine environment were the subject of International Maritime Organization (IMO) internal texts and domestic texts of Member States (for instance, the French case of the creation of an ecological protection zone in the Mediterranean). The United Nations launched the Global Marine Assessment programme (GMA) of which IOC is a part. Questions of safety at sea were also an area of concern and international texts are in preparation or under discussion. Lastly, an emerging question is that of the status of biodiversity in the sea bottom outside national jurisdiction. There is also a debate on relations between the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity.

These latter questions do not fall within the scope of this group of experts. They are however part of our legal and scientific environment. They show that the law of the sea is a live issue. International practice points up new questions that need to be addressed with due regard for what was framed 20 years ago, and with due concern for the interests of States and the international community. A group of experts such as IOC/ABE-LOS also serves these objectives.

ANNEX IV

LIST OF DOCUMENTS

Document Code	Title	Agenda Items	Langages
	WORKING DOCUMENTS		
IOC/ABE-LOS IV/1 prov. rev.	Revised Provisional Agenda	1-7	E F
IOC/ABE-LOS IV/1 Add. prov. rev.	Revised Provisional Timetable	2.2, 2.4	E F
IOC/ABE-LOS IV/1 Add. 2 prov.	Information Session on “Advances in Ocean Science and Modelling: Benefits and New Applications”	--	E F
IOC/ABE-LOS IV/2 prov.	Provisional Annotated Agenda	1-7	E F
IOC/ABE-LOS IV/3 prov.	Draft Summary Report (to be prepared during the meeting)	5-7	E F
IOC/ABE-LOS IV/4 prov.	Provisional List of Documents (this document)	2.3	E F
IOC/ABE-LOS IV/5 prov.	Provisional List of Participants (to be issued early during the Session)	--	--
IOC/ABE-LOS IV/6	Chairman's report on IOC/ABE-LOS Activities during the intersessional period (<i>Elie Jarmache</i>)	4.1	E F
IOC/ABE-LOS IV/7	Progress Report of the Chairman of the IOC/ABE-LOS Sub-Group on the possible establishment of an IOC internal appropriate procedure related to an effective use of Article 247 of UNCLOS under the auspices of international organizations (<i>Alfred Soons, Chairman</i>)	4.2	E F
IOC/ABE-LOS IV/7 Add.	Summary of Comments Regarding the IOC Internal Procedure Related to an Effective and Appropriate Use of Article 247 of the UN Convention on the Law of the Sea	4.2	E only
IOC/ABE-LOS IV/8	List of Points of Interest (<i>by Kari Hakapää, Chairman of the IOC/ABE-LOS Subgroup on the Legal Framework within the Context of UNCLOS which is applicable for the Collection of Oceanographic Data</i>)	4.4	E F
IOC/ABE-LOS IV/9	Introductory Paper of the Secretariat on the results of the IOC Questionnaire 3 on the practices of the IOC Member States regarding Marine Scientific Research and Transfer of Marine Technology	4.3	E F

Document Code	Title	Agenda Items	Langages
IOC/ABE-LOS IV/9 Annex	Draft Terms of Reference for the IOC/ABE-LOS Open-ended Working Group on Questionnaire Number 3 on Practices of States in the Field of Marine Scientific Research (MSR) and Transfer of Marine Technology (TMT)	4.3	E F
	INFORMATION DOCUMENTS		
IOC/ABE-LOS IV/Inf.1	Practical information		E
IOC/ABE-LOS IV/Inf.2	IOC Questionnaire No. 3 on the practices of the IOC Member States regarding Marine Scientific Research and Transfer of Marine Technology		E F
IOC/ABE-LOS IV/Inf.3	IOC Criteria and Guidelines on Transfer of Marine Technology		E F
--	Report on the data compilation and analysis of IOC Questionnaire number 3 (<i>Prepared by R.J. Rogers. Only available in CD-Rom</i>)		E
A/58/240	UNGA Resolution on Oceans and the Law of the Sea		E F
A/58/65	Report of the UN Secretary General to the 58 th Session of the United Nations General Assembly		E F
IOC/ABE-LOS III/3	Summary Report of the Third Session of the IOC Advisory Body of Experts on the Law of the Sea		E F

ANNEX V

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IRELAND/ROYAUME UNI DE
GRANDE BRETAGNE ET
D'IRLANDE DU NORD**

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**III. OBSERVERS/
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**UNITED NATIONS/NATIONS UNIES
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DIVISION FOR OCEAN AFFAIRS AND
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IOC/ABE-LOS IV/3
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Spiros Kogas
Vice-Mayor of Lefkada

Ms Fragouli Amalia
Assistant Vice-Mayor of Lefkada

ANNEX VI

LIST OF ACRONYMS

ABLOS	IHO/IAG/IOC Advisory Board on the (Technical and Scientific Aspects of the) Law of the Sea
CLCS	Commission on the Limits of the Continental Shelf
UN/OLA/DOALOS	Division for Ocean Affairs and Law of the Sea, Office of Legal Affairs, United Nations
EEZ	Exclusive Economic Zone
GOOS	Global Ocean Observing System
IOC/ABE-LOS	Advisory Body of Experts on the Law of the Sea
ICP	United Nations Informal Consultative Process on Ocean Affairs
I-GOOS	IOC-WMO-UNEP Intergovernmental Committee for the Global Ocean Observing System
IOC	Intergovernmental Oceanographic Commission (UNESCO)
JCOMMOPS	<i>In situ</i> Observing Platform Support centre of the Joint IOC-WMO Technical commission for Oceanography and Marine Meteorology
MSR	Marine Scientific Research
TEMA	Training, Education, and Mutual Assistance programme (IOC)
TMT	Transfer of Marine Technology
TMTA	Transfer of Marine Technology Application
UNCLOS	United Nations Convention on the Law of the Sea
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNGA	United Nations General Assembly
WSSD	World Summit on Sustainable Development

In this Series, entitled

Reports of Meetings of Experts and Equivalent Bodies, which was initiated in 1984 and which is published in English only, unless otherwise specified, the reports of the following meetings have already been issued:

1. Third Meeting of the Central Editorial Board for the Geological/Geophysical Atlases of the Atlantic and Pacific Oceans
2. Fourth Meeting of the Central Editorial Board for the Geological/Geophysical Atlases of the Atlantic and Pacific Oceans S. Fourth Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño' (**Also printed in Spanish**)
4. First Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
5. First Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
6. First Session of the Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
7. First Session of the Joint CCOP(SOPAC)-IOC Working Group on South Pacific Tectonics and Resources
8. First Session of the IODE Group of Experts on Marine Information Management
9. Tenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies in East Asian Tectonics and Resources
10. Sixth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
11. First Session of the IOC Consultative Group on Ocean Mapping (**Also printed in French and Spanish**)
12. Joint 100-WMO Meeting for Implementation of IGOSS XBT Ships-of-Opportunity Programmes
13. Second Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
14. Third Session of the Group of Experts on Format Development
15. Eleventh Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
16. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
17. Seventh Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
18. Second Session of the IOC Group of Experts on Effects of Pollutants
19. Primera Reunión del Comité Editorial de la COI para la Carta Batimétrica Internacional del Mar Caribe y Parte del Océano Pacífico frente a Centroamérica (**Spanish only**)
20. Third Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
21. Twelfth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
22. Second Session of the IODE Group of Experts on Marine Information Management
23. First Session of the IOC Group of Experts on Marine Geology and Geophysics in the Western Pacific
24. Second Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources (**Also printed in French and Spanish**)
25. Third Session of the IOC Group of Experts on Effects of Pollutants
26. Eighth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
27. Eleventh Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (**Also printed in French**)
28. Second Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
29. First Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
30. First Session of the IOCARIBE Group of Experts on Recruitment in Tropical Coastal Demersal Communities (**Also printed in Spanish**)
31. Second IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
32. Thirteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asia Tectonics and Resources
33. Second Session of the IOC Task Team on the Global Sea-Level Observing System
34. Third Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
35. Fourth Session of the IOC-UNEP-IMO Group of Experts on Effects of Pollutants
36. First Consultative Meeting on RNODCs and Climate Data Services
37. Second Joint IOC-WMO Meeting of Experts on IGOSS-IODE Data Flow
38. Fourth Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
39. Fourth Session of the IODE Group of Experts on Technical Aspects of Data Exchange
40. Fourteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asian Tectonics and Resources
41. Third Session of the IOC Consultative Group on Ocean Mapping
42. Sixth Session of the Joint IOC-WMO-CCPS Working Group on the Investigations of 'El Niño' (**Also printed in Spanish**)
43. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
44. Third Session of the IOC-UN(OALOS) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
45. Ninth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
46. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico
47. Cancelled
48. Twelfth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans
49. Fifteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asian Tectonics and Resources
50. Third Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
51. First Session of the IOC Group of Experts on the Global Sea-Level Observing System
52. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean
53. First Session of the IOC Editorial Board for the International Chart of the Central Eastern Atlantic (**Also printed in French**)
54. Third Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (**Also printed in Spanish**)
55. Fifth Session of the IOC-UNEP-IMO Group of Experts on Effects of Pollutants
56. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
57. First Meeting of the IOC *ad hoc* Group of Experts on Ocean Mapping in the WESTPAC Area
58. Fourth Session of the IOC Consultative Group on Ocean Mapping

59. Second Session of the IOC-WMO/IGOSS Group of Experts on Operations and Technical Applications
60. Second Session of the IOC Group of Experts on the Global Sea-Level Observing System
61. UNEP-IOC-WMO Meeting of Experts on Long-Term Global Monitoring System of Coastal and Near-Shore Phenomena Related to Climate Change
62. Third Session of the IOC-FAO Group of Experts on the Programme of Ocean Science in Relation to Living Resources
63. Second Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
64. Joint Meeting of the Group of Experts on Pollutants and the Group of Experts on Methods, Standards and Inter-calibration
65. First Meeting of the Working Group on Oceanographic Co-operation in the ROPME Sea Area
66. Fifth Session of the Editorial Board for the International Bathymetric and its Geological/Geophysical Series
67. Thirteenth Session of the IOC-IHO Joint Guiding Committee for the General Bathymetric Chart of the Oceans **(Also printed in French)**
68. International Meeting of Scientific and Technical Experts on Climate Change and Oceans
69. UNEP-IOC-WMO-IUCN Meeting of Experts on a Long-Term Global Monitoring System
70. Fourth Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
71. ROPME-IOC Meeting of the Steering Committee on Oceanographic Co-operation in the ROPME Sea Area
72. Seventh Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño' **(Spanish only)**
73. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico **(Also printed in Spanish)**
74. UNEP-IOC-ASPEI Global Task Team on the Implications of Climate Change on Coral Reefs
75. Third Session of the IODE Group of Experts on Marine Information Management
76. Fifth Session of the IODE Group of Experts on Technical Aspects of Data Exchange
77. ROPME-IOC Meeting of the Steering Committee for the Integrated Project Plan for the Coastal and Marine Environment of the ROPME Sea Area
78. Third Session of the IOC Group of Experts on the Global Sea-level Observing System
79. Third Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
80. Fourteenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans
81. Fifth Joint IOG-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
82. Second Meeting of the UNEP-IOC-ASPEI Global Task Team on the Implications of climate Change on Coral Reefs
83. Seventh Session of the JSC Ocean Observing System Development Panel
84. Fourth Session of the IODE Group of Experts on Marine Information Management
85. Sixth Session of the IOC Editorial Board for the International Bathymetric chart of the Mediterranean and its Geological/Geophysical Series
86. Fourth Session of the Joint IOC-JGOFS Panel on Carbon Dioxide
87. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Pacific
88. Eighth Session of the JSC Ocean Observing System Development Panel
89. Ninth Session of the JSC Ocean Observing System Development Panel
90. Sixth Session of the IODE Group of Experts on Technical Aspects of Data Exchange
91. First Session of the IOC-FAO Group of Experts on OSLR for the IOCINCWIO Region
92. Fifth Session of the Joint IOC-JGOFS CO₂ Advisory Panel Meeting
93. Tenth Session of the JSC Ocean Observing System Development Panel
94. First Session of the Joint CMM-IGOSS-IODE Sub-group on Ocean Satellites and Remote Sensing
95. Third Session of the IOC Editorial Board for the International Chart of the Western Indian Ocean
96. Fourth Session of the IOC Group of Experts on the Global Sea Level Observing System
97. Joint Meeting of GEMSI and GEEP Core Groups
98. First Session of the Joint Scientific and Technical Committee for Global Ocean Observing System
99. Second International Meeting of Scientific and Technical Experts on Climate Change and the Oceans
100. First Meeting of the Officers of the Editorial Board for the International Bathymetric Chart of the Western Pacific
101. Fifth Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico
102. Second Session of the Joint Scientific and Technical Committee for Global Ocean Observing System
103. Fifteenth Session of the Joint IOC-IHO Committee for the General Bathymetric Chart of the Oceans
104. Fifth Session of the IOC Consultative Group on Ocean Mapping
105. Fifth Session of the IODE Group of Experts on Marine Information Management
106. IOC-NOAA *Ad hoc* Consultation on Marine Biodiversity
107. Sixth Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
108. Third Session of the Health of the Oceans (HOTO) Panel of the Joint Scientific and Technical Committee for GLOSS
109. Second Session of the Strategy Subcommittee (SSC) of the IOC-WMO-UNEP Intergovernmental Committee for the Global Ocean Observing System
110. Third Session of the Joint Scientific and Technical Committee for Global Ocean Observing System
111. First Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate
112. Sixth Session of the Joint IOC-JGOFS CO₂ Advisory Panel Meeting
113. First Meeting of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional - Global Ocean Observing System (NEAR-GOOS)
114. Eighth Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of "El Niño" **(Spanish only)**
115. Second Session of the IOC Editorial Board of the International Bathymetric Chart of the Central Eastern Atlantic **(Also printed in French)**
116. Tenth Session of the Officers Committee for the Joint IOC-IHO General Bathymetric Chart of the Oceans (GEBCO), USA, 1996
117. IOC Group of Experts on the Global Sea Level Observing System (GLOSS), Fifth Session, USA, 1997
118. Joint Scientific Technical Committee for Global Ocean Observing System (J-GOOS), Fourth Session, USA, 1997
119. First Session of the Joint 100-WMO IGOSS Ship-of-Opportunity Programme Implementation Panel, South Africa, 1997
120. Report of Ocean Climate Time-Series Workshop, Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate, USA, 1997

121. IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional Global Ocean Observing System (NEAR-GOOS), Second Session, Thailand, 1997
122. First Session of the IOC-IUCN-NOAA *Ad hoc* Consultative Meeting on Large Marine Ecosystems (LME), France, 1997
123. Second Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), South Africa, 1997
124. Sixth Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico, Colombia, 1996 **(also printed in Spanish)**
125. Seventh Session of the IODE Group of Experts on Technical Aspects of Data Exchange, Ireland, 1997
126. IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), First Session, France, 1997
127. Second Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LME), France, 1998
128. Sixth Session of the IOC Consultative Group on Ocean Mapping (CGOM), Monaco, 1997
129. Sixth Session of the Tropical Atmosphere - Ocean Array (TAO) Implementation Panel, United Kingdom, 1997
130. First Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), France, 1998
131. Fourth Session of the Health of the Oceans (HOTO) Panel of the Global Ocean Observing System (GOOS), Singapore, 1997
132. Sixteenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (GEBCO), United Kingdom, 1997
133. First Session of the IOC-WMO-UNEP-ICSU-FAO Living Marine Resources Panel of the Global Ocean Observing System (GOOS), France, 1998
134. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean (IOC/EB-IBCWIO-IW3), South Africa, 1997
135. Third Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), France, 1998
136. Seventh Session of the Joint IOC-JGOFS C02 Advisory Panel Meeting, Germany, 1997
137. Implementation of Global Ocean Observations for GOOS/GCOS, First Session, Australia, 1998
138. Implementation of Global Ocean Observations for GOOS/GCOS, Second Session, France, 1998
139. Second Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), Brazil, 1998
140. Third Session of IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional - Global Ocean Observing System (NEAR-GOOS), China, 1998
141. Ninth Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño', Ecuador, 1998 **(Spanish only)**
142. Seventh Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and its Geological/Geophysical Series, Croatia, 1998
143. Seventh Session of the Tropical Atmosphere-Ocean Array (TAO) Implementation Panel, Abidjan, Côte d'Ivoire, 1998
144. Sixth Session of the IODE Group of Experts on Marine Information Management (GEMIM), USA, 1999
145. Second Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), China, 1999
146. Third Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), Ghana, 1999
147. Fourth Session of the GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC); Fourth Session of the WCRP CLIVAR Upper Ocean Panel (UOP); Special Joint Session of OOPC and UOP, USA, 1999
148. Second Session of the IOC-WMO-UNEP-ICSU-FAO Living Marine Resources Panel of the Global Ocean Observing System (GOOS), France, 1999
149. Eighth Session of the Joint IOC-JGOFS CO2 Advisory Panel Meeting, Japan, 1999
150. Fourth Session of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional – Global Ocean Observing System (NEAR-GOOS), Japan, 1999
151. Seventh Session of the IOC Consultative Group on Ocean Mapping (CGOM), Monaco, 1999
152. Sixth Session of the IOC Group of Experts on the Global Sea level Observing System (GLOSS), France, 1999
153. Seventeenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (GEBCO), Canada, 1999
154. Comité Editorial de la COI para la Carta Batimétrica Internacional del Mar Caribe y el Golfo de Mexico (IBCCA), Septima Reunión, Mexico, 1998
IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (IBCCA), Seventh Session, Mexico, 1998
155. Initial Global Ocean Observing System (GOOS) Commitments Meeting, IOC-WMO-UNEP-ICSU/Impl-III/3, France, 1999
156. First Session of the *ad hoc* Advisory Group for IOCARIBE-GOOS, Venezuela, 1999 **(also printed in Spanish and French)**
157. Fourth Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), China, 1999
158. Eighth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and its Geological/Geophysical Series, Russian Federation, 1999
159. Third Session of the IOC-WMO-UNEP-ICSU-FAO Living Marine Resources Panel of the Global Ocean Observing System (GOOS), Chile, 1999
160. Fourth Session of the IOC-WMO-UNEP-ICSU-FAO Living Marine Resources Panel of the Global Ocean Observing System (GOOS). Hawaii, 2000
161. Eighth Session of the IODE Group of Experts on Technical Aspects of Data Exchange, USA, 2000
162. Third Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LME), France, 2000
163. Fifth Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), Poland, 2000
164. Third Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), France, 2000
165. Second Session of the *ad hoc* Advisory Group for IOCARIBE-GOOS, Cuba, 2000 **(also printed in Spanish and French)**
166. First Session of the Coastal Ocean Observations Panel, Costa Rica, 2000
167. First GOOS Users' Forum, 2000
168. Seventh Session of the Group of Experts on the Global Sea Level Observing System, Honolulu, 2001
169. First Session of the Advisory Body of Experts on the Law of the Sea (ABE-LOS), France, 2001 **(also printed in French)**
170. Fourth Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System, Chile, 2001
171. First Session of the IOC-SCOR Ocean CO₂ Advisory Panel, France, 2000
172. Fifth Session of the GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), Norway, 2000 **(electronic copy only)**
173. Third Session of the *ad hoc* Advisory Group for IOCARIBE-GOOS, USA, 2001 **(also printed in Spanish and French)**
174. Second Session of the Coastal Ocean Observations Panel and GOOS Users' Forum, Italy, 2001
175. Second Session of the Black Sea GOOS Workshop, Georgia, 2001
176. Fifth Session of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional – Global Ocean Observing System (NEAR-GOOS), Republic of Korea, 2000

177. Second Session of the Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Morocco, 2002 **(also printed in French)**
178. Sixth Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), Australia, 2001 **(electronic copy only)**
179. *Cancelled*
180. Second Session of the IOC-SCOR Ocean CO₂ Advisory Panel, Honolulu, Hawaii, U.S.A, 2002 **(electronic copy only)**
181. IOC Workshop on the Establishment of SEAGOOS in the Wider Southeast Asian Region, Seoul, Republic of Korea, 2001 (SEAGOOS preparatory workshop) **(electronic copy only)**
182. First Session of the IODE Steering Group for the Resource Kit, USA, 19–21 March 2001
183. Fourth Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), France, 2002
184. Seventh Session of the IODE Group of Experts on Marine Information Management (GEMIM), France, 2002 **(electronic copy only)**
185. Sixth Session of IOC/WESTPAC Coordinating Committee for the North-East Asian Regional - Global Ocean Observing System (NEAR-GOOS), Republic of Korea, 2001 **(electronic copy only)**
186. First Session of the Global Ocean Observing System (GOOS) Capacity Building Panel, Switzerland, 2002 **(electronic copy only)**
187. Fourth Session of the ad hoc Advisory Group for IOCARIBE-GOOS, 2002, Mexico **(also printed in French and Spanish)**
188. Fifth Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean (IBCWIO), Mauritius, 2000
189. Third session of the Editorial Board for the International Bathymetric Chart of the Western Pacific, China, 2000
190. Third Session of the Coastal Ocean Observations Panel and GOOS Users' Forum, Vietnam, 2002
191. Eighth Session of the IOC Consultative Group on Ocean Mapping, Russian Federation, 2001
192. Third Session of the Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Lisbon, 2003 **(also printed in French)**
193. Extraordinary Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño', Chile, 1999 **(Spanish only; electronic copy only)**
194. Fifth Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System, France, 2002
195. Sixth Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System, South Africa, 2003
196. Fourth Session of the Coastal Ocean Observations Panel, South Africa, 2002 **(electronic copy only)**
197. First Session of the JCOMM/IODE Expert Team On Data Management Practices, Belgium, 2003 *(also JCOMM Meeting Report No. 25)*
198. Fifth Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), Paris, 2003
199. Ninth Session of the IOC Consultative Group on Ocean Mapping, Monaco, 2003 **(Recommendations in English, French, Russian and Spanish included)**
200. Eighth Session of the IOC Group of Experts on the Global Sea level Observing System (GLOSS), France, 2003 **(electronic copy only)**
201. Fourth Session of the Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Greece, 2004 **(also printed in French)**